

1. Dead Load - Actual weight of materials used adding the following: a. Allowance for ceilings, mechanical equipment and roof assembly b. Allowance for HVAC, and plumbing c. Allowance for Floor finishes d. Allowance for Additional Concrete in at maximum deflection 10 psf e. Maximum mechanical Point Loads (applied anywhere to roof structure) 1000 lb 2. Flat Roof Snow Load 3. Roof Live Load 20 psf 100 psf 4. Floor Live Load 23 psf 5. Wind Load applied to corridor 6. Wind Loading to Canopy (ASCE 7 Analytical Method, Case A controls) 7. Seismic Design Category 1. The Foundation design is based upon the geotechnical information available at the site associated with the construction of the parking garage dated May 2010 prepared by CGC, Inc. 2. Allowable Soil Bearing Capacity: 2000 psf 3. Frost Depth: 48 in. **General Structural Notes** 1. Structural drawings should not be scaled. Printed dimensions have precedence over scaled drawings and large scale 2. All drawings and specifications are considered to be a part of the contract documents. Structural drawings shall be used in conjunction with the civil, architectural, mechanical, electrical, and plumbing drawings for location of equipment, openings, floor depressions, curbs, etc. not indicated on the structural drawings. The location and size of mechanical and electrical openings in slabs, walls and decks shall be coordinated by the contractor. Provide all additional framing or reinforcing to accommodate openings as required by the applicable standard details shown on the structural details or provided by the structural engineer. 3. No holes, notches, etc. are allowed in structural members unless detailed on the structural drawings or approved by the structural engineer. 4. Where dimensions are provided for openings, floor depressions, curbs etc. but may be affected by the equipment purchased, the contractor shall verify the information provided prior to construction. 5. Provide concrete equipment pads at bases for mechanical and electrical installations. Construct pads and bases in accordance with the typical details. See mechanical and electrical drawings for limits and locations. 6. Contractor shall provide and be responsible for the protection and repair of adjacent surfaces and areas which may 7. All columns and foundations, unless noted otherwise, shall be centered on gridlines in each direction. Beams shall be equally spaced between column centerlines, unless noted otherwise. 8. Typical details shall apply in general construction unless specifically detailed. Where no details are given, construction shall be as shown for similar work. 9. The contractor shall be responsible for adequate design and construction of all forms shoring, and temporary bracing. The contractor shall provide all measures necessary to protect the structure and safety of workmen during a. Do not place construction materials or other construction loads on the structure such that the loads placed exceed the capacity of the structure. b. Take into consideration that full structural capacity of many structural members is not realized until structural assembly is complete; that is, until slabs, decks, diagonal bracing, and shear walls are installed. c. Provide necessary temporary bracing and guying to provide stability and resist all loads to which the partially completed structure may be subjected, including erection equipment and its operation. Adequacy of temporary bracing and guying for this purpose is the sole responsibility of the contractor. Patient Connecting Corridor Notes: 1. Field splices of main truss members shall be provided in accordance with details 6/S400 and 9/S501. Splice has been designed for the full capacity of the chord member and may be provided at any panel within the truss at the contractor's option to facilitate assembly, transportation and erection of the truss. 2. Truss diagonal web, floor bracing, and roof bracing members which cross a spliced panel shall be field welded as whole member (not spliced) in accordance with the applicable connection details. 3. Contractor shall submit phasing plan detailing erection and concrete pour sequences for approval. 4. No concrete shall be placed until the steel framing has been erected and record surveys completed. 5. Field welding shall not be permitted unless specifically noted on the plans, or as required for field splices.. Contractor shall take necessary precautions and coordinate with the Owner's representative for the protection of the public at the hospital entrance. 6. Truss members shall be continuous over all supports. Materials of Construction 1. Reinforced Concrete 28 Day Compressive Strength: F'c = 4,000 psi a. Footings b. Concrete Piers, site flatwork F'c = 4,000 psi, Air Entrained c. Lightweight Concrete F'c = 4000 psi, 110 lb/ft3 maximum2. Reinforcing Steel - ASTM A615 - Grade 60 Fy = 60ksi 3. Reinforcing steel to be welded - ASTM A706 Grade 60 Fy = 60ksi 4. Welded wire fabric - ASTM A185 Fy = 70ksi Structural Steel Wide Flange and Tee shapes - ASTM A992 Fy = 50 ksi Angles, Channels and Plate - ASTM A36 Fy = 36 ksi Unless Noted Otherwise HSS Tubes and Pipes for Canopy - ASTM A 847 Fy = 50 ksi "Weathering Steel" HSS Tubes and Pipes for Corridor - ASTM A 500 Gr. B Fy = 42 ksi Pipes - ASTM A53 Grade B Fy = 35 ksi Bolts ASTM F 1582 Anchor Bolts - ASTM F 1554 Grade 36 Fy = 36 ksi Welding electrodes - E70XX Composite Metal Form Deck (Galvanized) ASTM A653 G60 Zinc coating Fy = 40ksi, Structural Quality 6. Non-shrink Grout and Non-metallic Grout F'c = 4000 psi at 7 Days at base plates and bearing plats

Earthwork and Foundations 1. All earthwork and site preparation shall be performed in strict accordance with the specifications. Al foundation elevations shall be observed and approved by the geotech. 2. Any existing fills or unsuitable soils as determined by the geotech shall be excavated and replaced with properely compacted fill. 3. Extreme care shall be exercised when excavating or grading adjacent to existing structures or improvements so as not to damage or undermine foundations, walls, slabs, utilities, etc. 4. Do not excavate below the bearing elevation of any completed footing nor any closer to the footing than a slope of two horizontal to one vertical (measured from the edge of footing to the nearest point in the excavation). 5. Horizontal construction joints in column footings, slabs on grade and ribbed mat foundations are not permitted. 6. The bottom of all footings and pile caps subject to frost shall be placed at or below frost depth. 1. Expansion anchors shall be a single-end expansion shield anchor which complies with the descriptive part of federal specification A-A 1923A, Type 4, for wedge anchors. Wedge anchors shall be Hilti Kwik bolt. Shell anchors shall be Hilti HIDI. Anchors shall be by Hilti Fastening Systems of Tulsa, OK (ICC ES Reports ESR-1917 for wedge anchors and ESR 2895 for shell anchors) or equal. 2. Anchors shall be stainless steel where exposed to weather, and zinc plated indoors unless specifically noted otherwise. 3. When details of sections indicate expansion anchors but no size, provide anchors with ¾" diameter. 4. Provide the following embedment depths unless noted otherwise. Anchor Diameter Embedment Depth 3/8" 2 ½" 1/2" 3 ½" 5/8" 4 ¾" 5. When installing drilled-in-anchors, use care and caution to avoid cutting or damaging the existing reinforcing bars. 1. Reinforcing, bar dowels, reinforcing bars, threaded rods, bolts, etc. which are indicated to be adhesive doweled into concrete or solid masonry shall be accomplished by using HIT HY-150 adhesive by hilti fastening systems of Tulsa, OK (ICC Report No. ER 1593) or Equal meeting ASTM C 881. 2. Drill, brush, and clean all holes and install all anchors in complete accordance with manufacturer's published recommendations, as well as applicable building codes or engineering reports. 3. Provide the following minimum anchor embedment depths unless specifically noted otherwise on the details: a. Reinforcing Bars **Embedment Depth** Bar Size 12" b. Bolts or Threaded Rods Diameter **Embedment Depth** 3/8" 4. When drilling and installing anchors use care and caution to avoid cutting reinforcing bars. 1. Steel framing designations and symbols are defined in the structural steel symbol legend. 2. All field bolted shear connections shall be made with minimum ¾" diameter F1582 Bolts, unless noted otherwise. All bolts shall be fully pre-tensioned and inspected using tension control twist-off style bolts. Unless specifically indicated as snug tight, all joints shall be designated as pre-tensioned. Routine observation to verify the splined ends are properly severed during installation is required for all bolts. 3. Place non-shrink grout under all column base plates before placing any elevated slabs. 4. Where the work of other trades requires cuts or openings to be made in the structural steel members, approval shall be obtained from the engineer. Such openings shall be made in the shop and clearly indicated on the shop 5. E70XX electrodes shall be used for all welding. Properly qualified welders shall perform all welding, as prescribed under "standard qualification procedure" of the American Welding Society.

6. Weld lengths called for on the plans are the net effective length required. Where fillet weld symbol is given without

7. All grove welds indicated on plans and sections shall be complete joint penetration welds (CJP) unless specifically

Specialized blind bolts such as "Box Bolt" by Simplified Building Concepts, Rochester, NY may be substituted for

indication of size, use minimum size welds as specified by AISC or 3/16" whichever is greater.

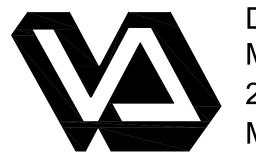
8. Where through bolts to HSS tubes or pipes are shown bolts shall be installed to the snug tight condition.

indicated to be partial penetration welds.

through bolts, subject to approval of the structural engineer.

Concrete and Reinforcing 1. Location of Construction joints or pour joints shall be as indicated on approved shop drawings. 2. All concrete shall be vibrated during placement. 3. Provide ¾" chamfer on all exposed concrete corners. 4. Anchor Bolts, dowels, reinforcing steel, inserts, etc. shall be securely tied in place prior to pouring concrete. Concrete blocks only shall be used to support reinforcing off grade. 5. All reinforcement shall be detailed, fabricated, and placed in accordance with ACI 315. 6. Provide minimum concrete covering for reinforcement as follows: Condition Clear Cover Concrete deposited against earth Formed surfaces exposed to weather or in contact with earth: Reinforcing Bars less than NO. 6 Reinforcing Bars NO. 6 or Larger 7. Provide dowels of same size and number from adjacent pour both vertically and horizontally to match typical reinforcing shown. Laps to be in accordance with the development length and lap splice schedule. Dowels shall be cleaned after pour. 8. Field welding or bending of reinforcing is not permitted except as indicated on the drawings or as approved by the structural engineer. Use low hydrogen electrodes grade E70 or E90 as required. 9. Approved electrical conduit material cast within structural concrete members shall conform to the following: a. Conduit in mat foundations: Diameter of a single conduit or two or more vertically stacked conduits (including crossovers) shall not exceed 1/3 of the thickness of the slab. b. Conduit in Elevated Slabs: Do not install conduit in concrete slabs on metal deck without prior approval of structural engineer. 10. Continuous Reinforcement in Walls and Footings may be spliced as required provided that bars are of the longest practical length and all splices are shown on the reinforcing bar shop drawings. Splices are to be staggered when possible. Provide lap splices and development lengths in accordance with the development length and lap splice 11. Coring of slabs, beams and columns or shear walls is not permitted. Provide sleeves for all penetrations prior to placing concrete. Locations to be approved by structural engineer.

100% CONSTRUCTION DOCUMENTS



Date

Revisions:

VA FORM 08-6231, OCT 1978

Dept. of Veterans Affairs **Medical Center** 2500 Overlook Terrace Madison, WI, 53750



CHEQUAMEGON BAY ENGINEERING, INC.

PROJECT LEADER/ARCHITECT:

ASHLAND, WI 211 6TH STREET WEST ASHLAND, WI, 54806 PHONE: (715) 682-6004 FAX: (715) 682-6025 MILWAUKEE, WI 933 N. MAYFAIR RD.,

Connecting Corridor -Structural Notes Approved: Project Director

Project Title Corridor

Patient Entrance Canopy/ Mental Health Connecting Madison, Wisconsin

Project Number 607-CSI-103 **Building Number** Drawing Number

S000

Department of Veterans Affairs

CONSULTANTS:

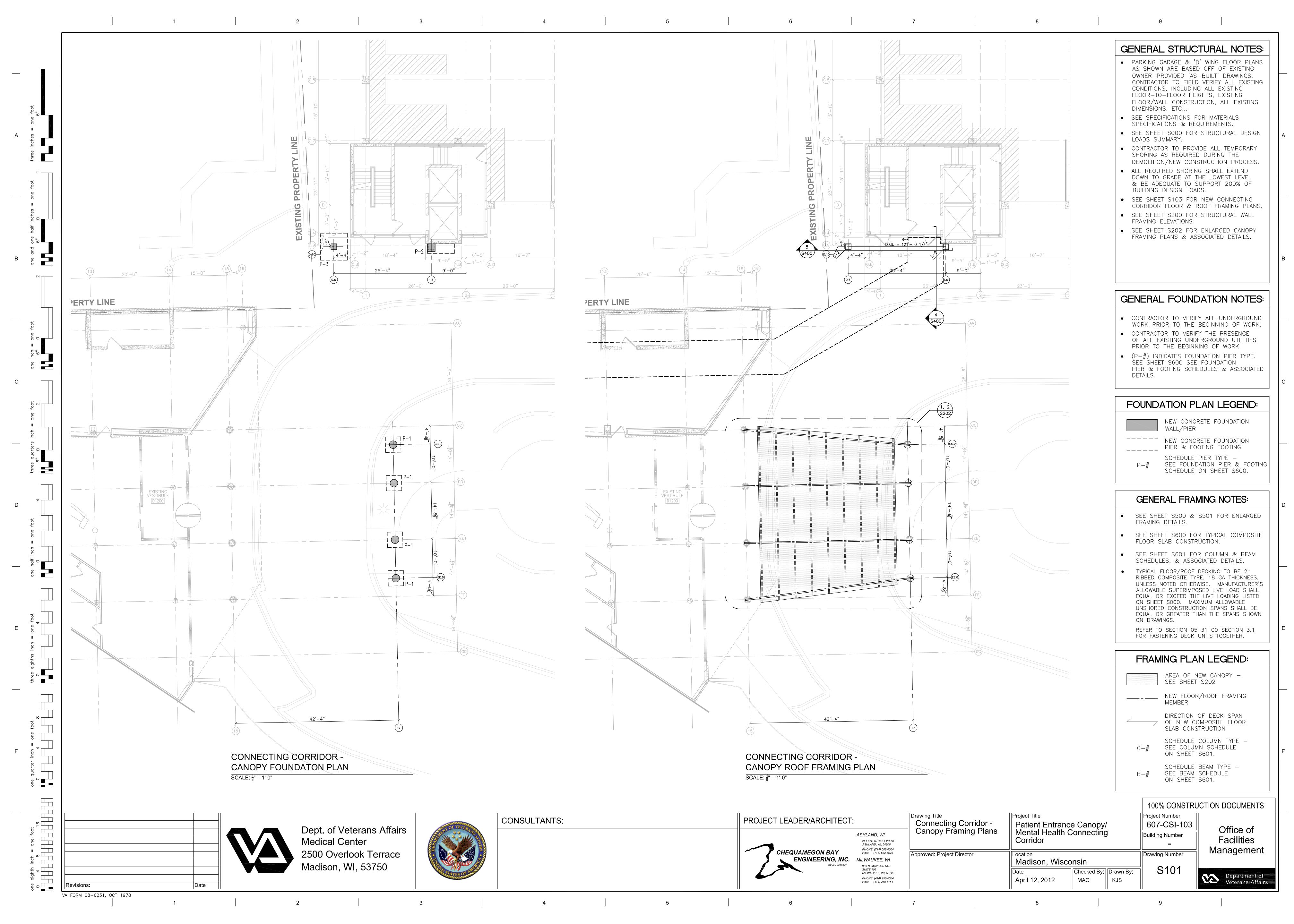
MILWAUKEE, WI, 53226 PHONE: (414) 258-6004 April 12, 2012

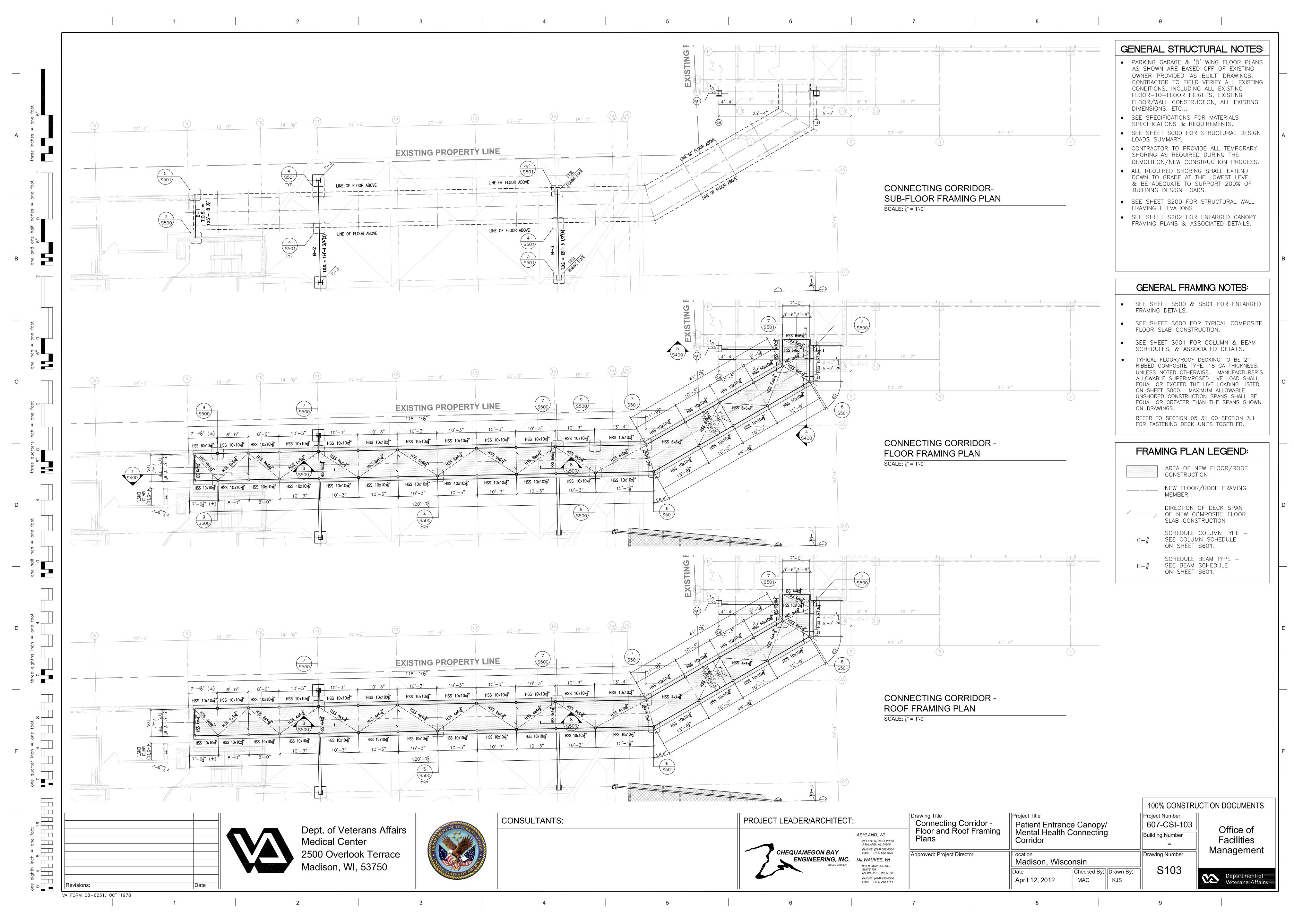
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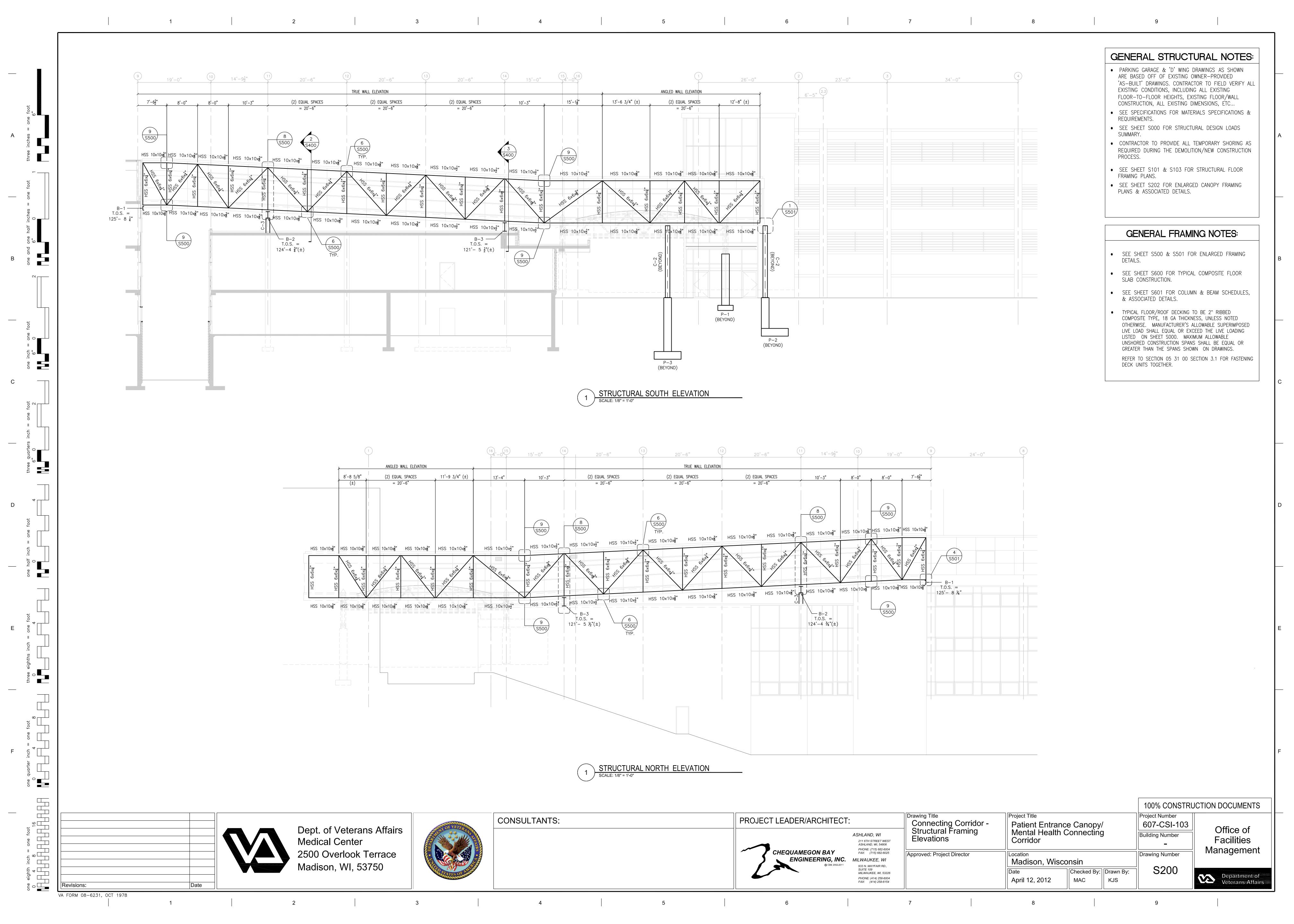
Management

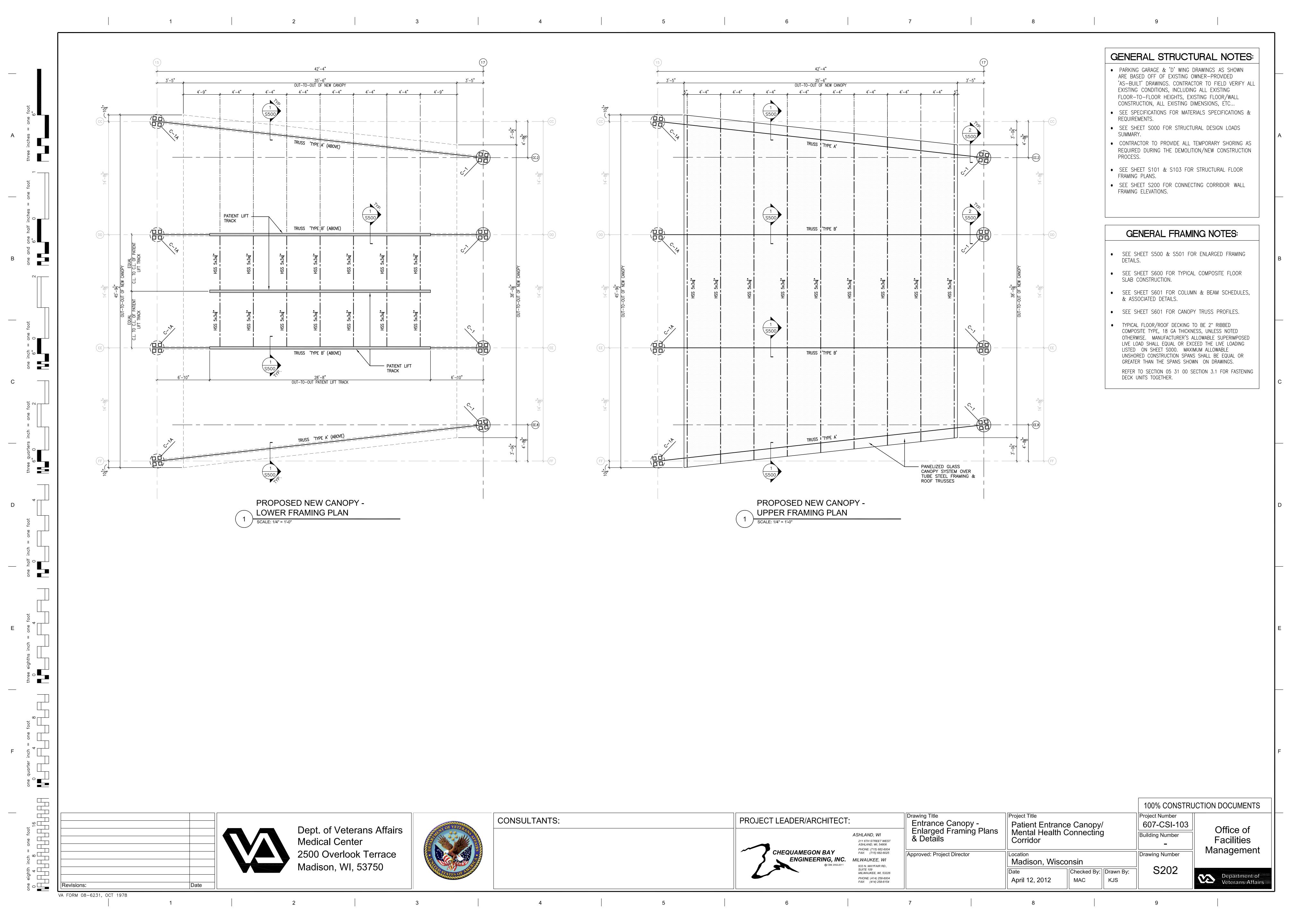
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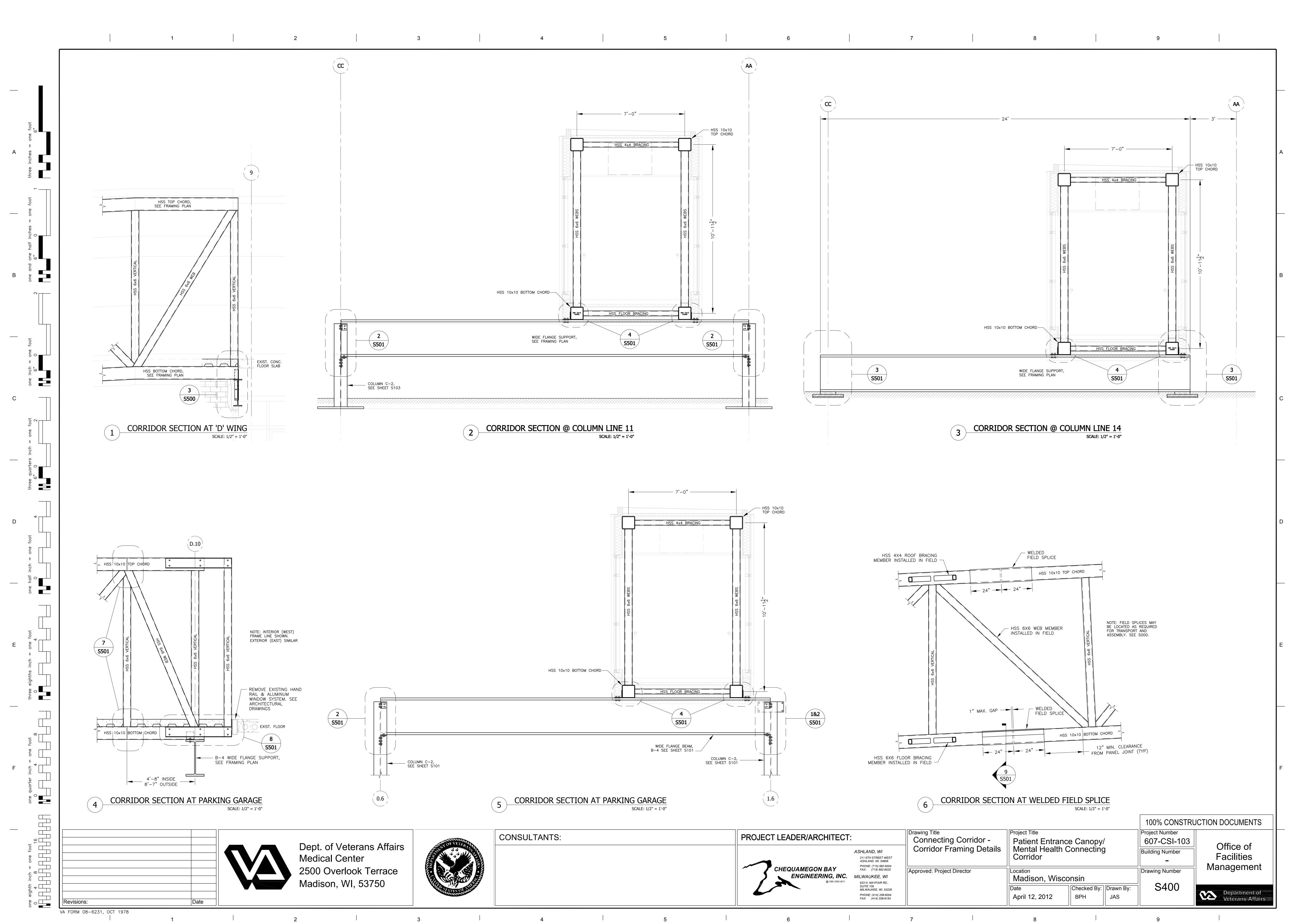
Facilities

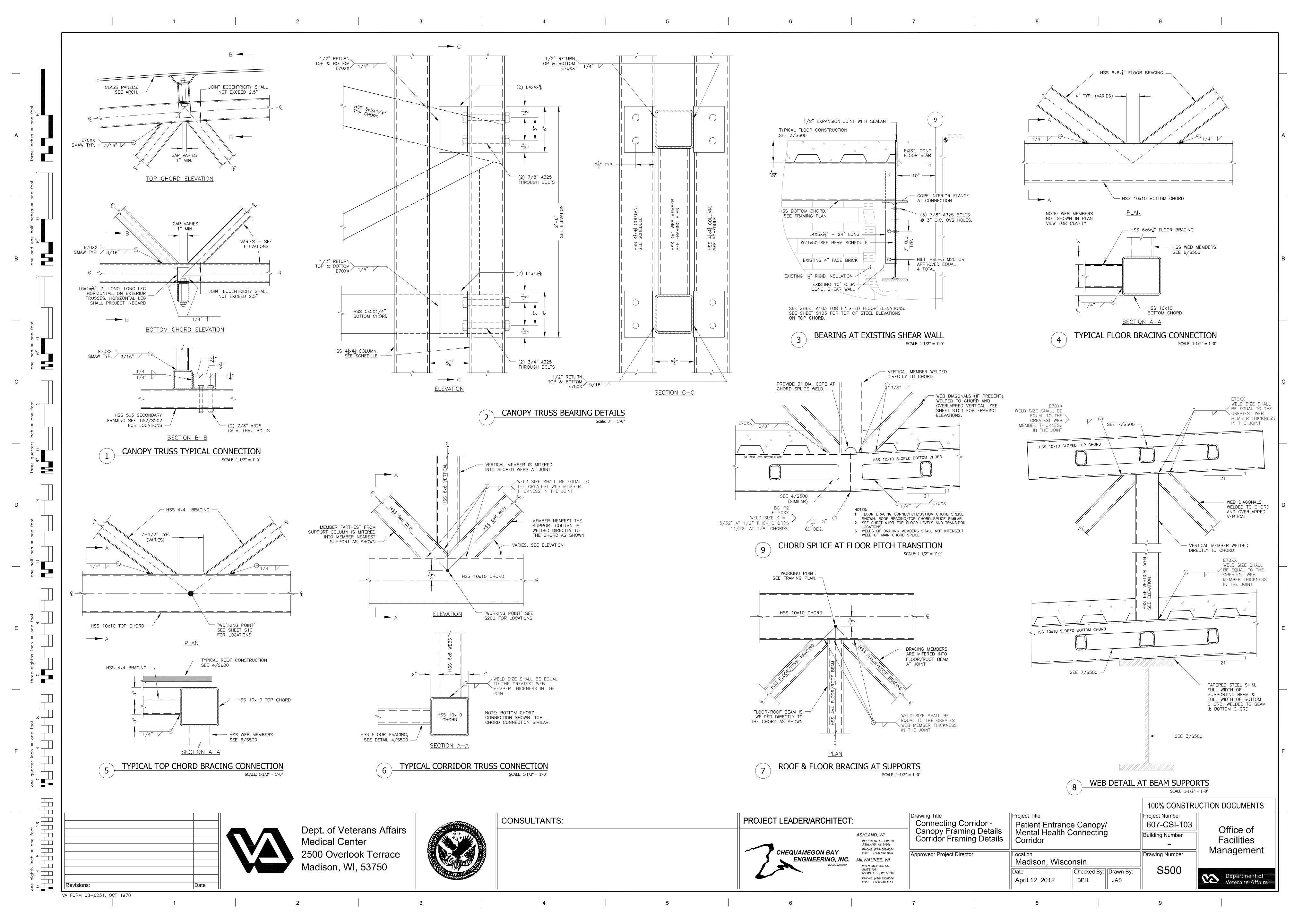


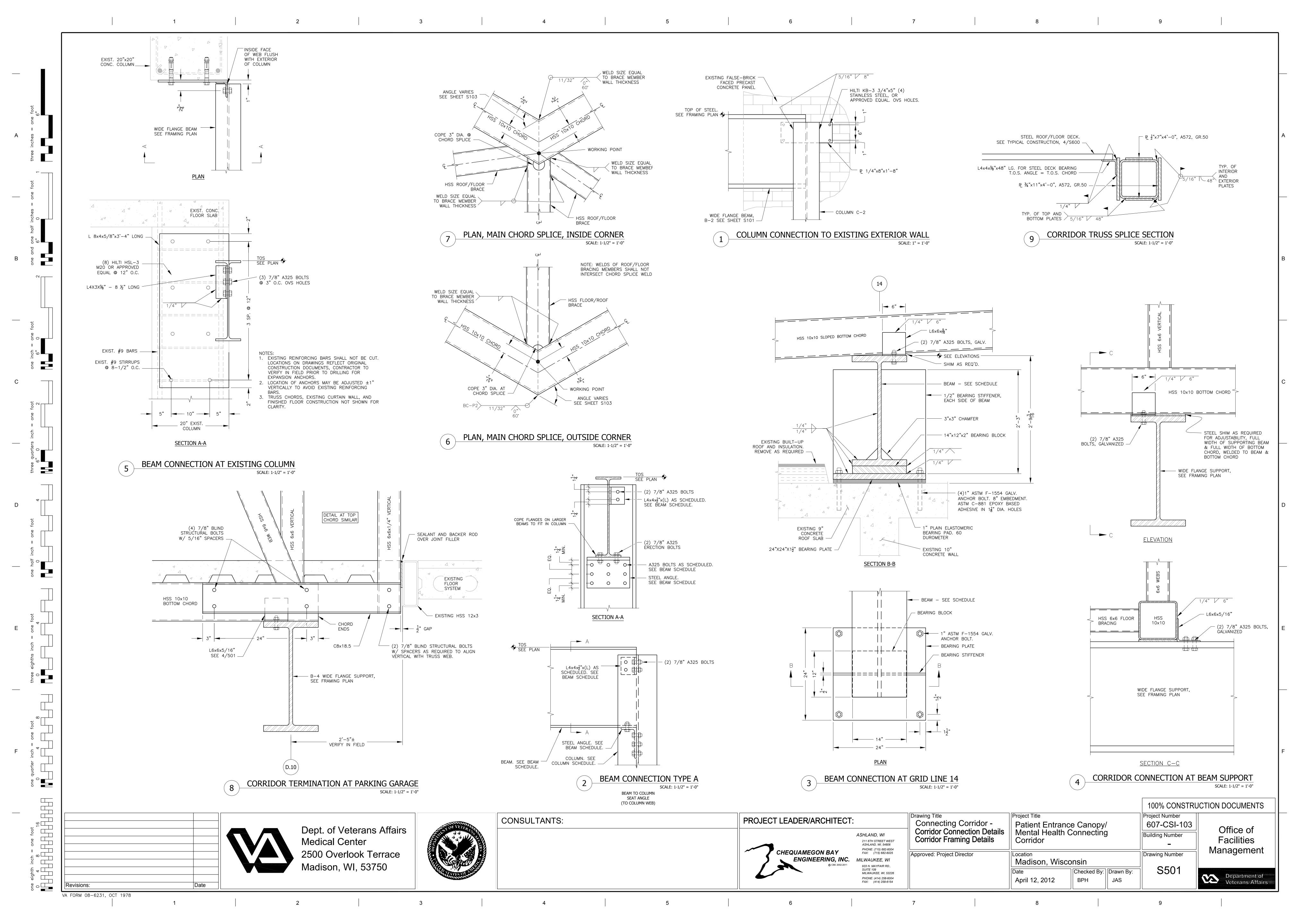


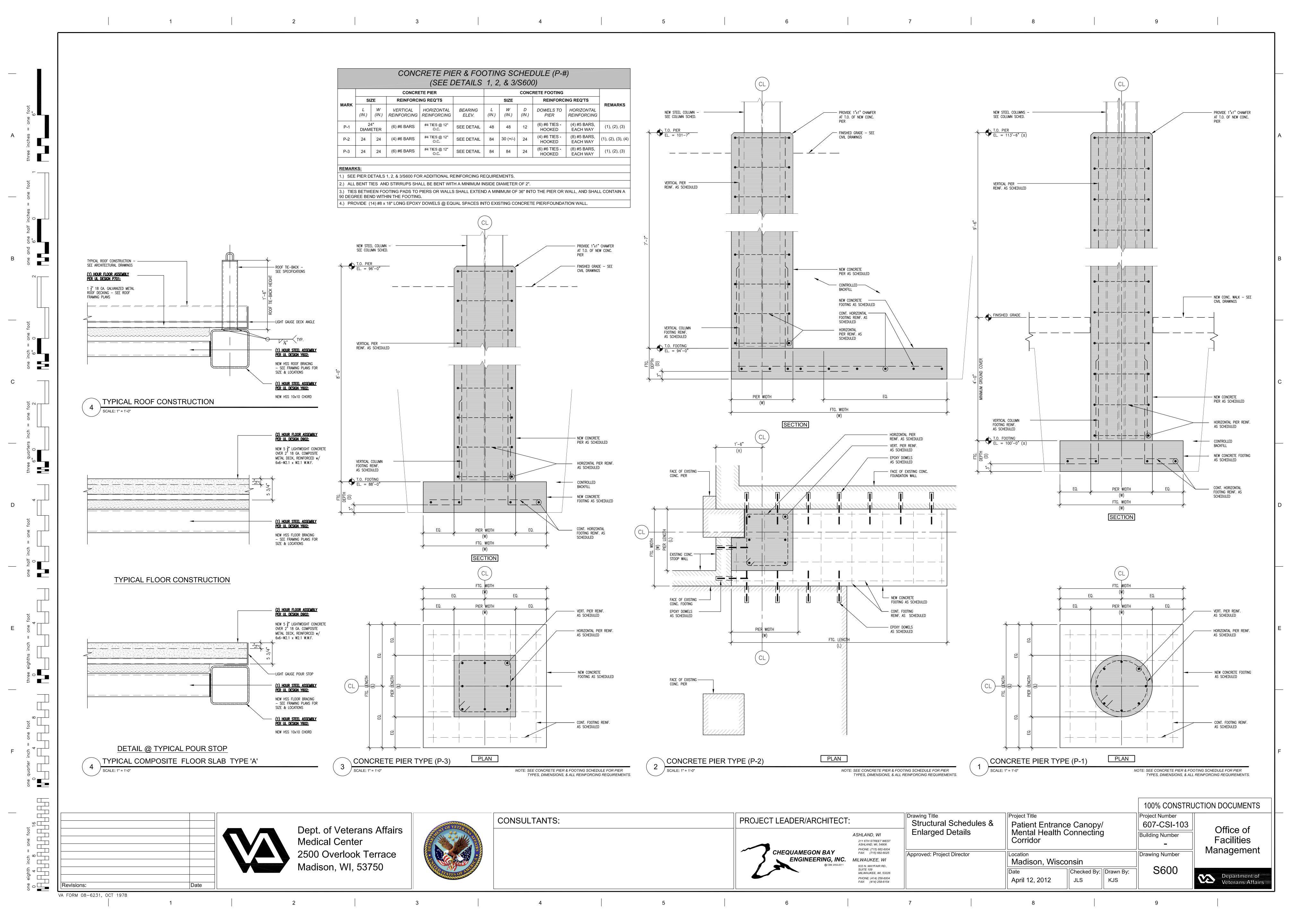












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en o	HSS 5x5x 1/4" BOTTOM CHORD TO BE CONTINUOUS	HEAVY HEX HEAD NON—SHRINK GROUT EXISTING CONCRETE ROOF STRUCTURE
CANOPY TRUSS PROFILES TYPES 'A' & 'B'		COLUMN ANCHOR BOLT TYPE 'A' BASEPLATE LEVELING TYPE 'A' BASEPLATE LEVELING TYPE 'B'
SCALE: $\frac{3}{8}$ " = 1'-0"		SCALE: NTS SCALE: NTS
	CONSULTANTS:	PROJECT LEADER/ARCHITECT: Drawing Title Structural Schedules & Project Title Project Title Project Number 607-CSI-103
	of Veterans Affairs cal Center	PROJECT LEADER/ARCHITECT: ASHLAND, WI 211 6TH STREET WEST ASHLAND, WI, 54806 Structural Schedules & Enlarged Details Structural Schedules & Mental Health Connecting Corridor Patient Entrance Canopy/ Mental Health Connecting Corridor Facilities
2500	Overlook Terrace son, WI, 53750	CHEQUAMEGON BAY ENGINEERING, INC. MILWAUKEE, WI ASHLAND, WI, 34806 PHONE: (715) 682-6004 FAX: (715) 682-6005 MILWAUKEE, WI Approved: Project Director Madison, Wisconsin Madison, Wisconsin
Revisions: Date	DOIT, VVI, DOI DO	933 N. MAYFAIR RD., SUITE 109 MILWAUKEE, WI, 53226 PHONE: (414) 258-6004 FAX: (414) 258-6154 933 N. MAYFAIR RD., SUITE 109 MILWAUKEE, WI, 53226 April 12, 2012 Checked By: JLS Checked By: KJS Department of Voterans Affairs
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